



*Internships are intended for undergraduate and graduate students. Some positions are also open to qualified high school students (in their senior year and with their own transportation). These internships are an excellent way to learn new skills and consider a career with the National Park Service while gaining valuable experience and new insights. **Internships last 8-10 weeks beginning in May-June.***

*There are nine positions available:*

- *Catoctin Mountain Park, Thurmont, MD -- Invasive Plant control & Monitoring; GIS assistant, p. 1-2*
- *Chesapeake & Ohio Canal NHP, Hagerstown, MD-- GIS assistant, p. 3*
- *Harpers Ferry National Historical Park, Harpers Ferry, WV -- Natural Resource Management Assistant, p. 4*
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## Catoctin Mountain Park, MD

[www.nps.gov/cato](http://www.nps.gov/cato)

### (1) Invasive plant control and monitoring

#### General Description:

Catoctin Mountain Park - a 5,810-acre hardwood forest park with refreshing streams and scenic vistas, offers a rare haven in a rapidly developing area of the country. In 2004, a park-wide survey was conducted to quantify the distribution and abundance of non-native plants. In anticipation of changes in forest structure brought about by a proposed direct reduction of the park deer population, the park would like to revisit this survey.

#### Intern duties/tasks:

Intern will evaluate the 2004 park survey of non-native plant distribution and record new and/or expanding populations of non-native plants. Using a Global Position System receiver, the intern will return to areas of previously recorded exotic plant infestations, and evaluate the change in the size of the plant population since the last survey. The student will also have an opportunity to learn how to chemically treat some non-native invasive plants. The intern will also help with deer management, rare plant inventories and environmental education. There will be many opportunities to work with the park Youth Conservation Corps on conservation projects.

#### What will intern gain in professional development?

The intern will learn to identify several common species of exotic plants that are currently a concern to park management, field methods for control of exotic plants, Geographical Information Systems (GIS), and the use of advanced Global Positioning System (GPS) receivers. The staff at Catoctin Mountain Park strives to provide a holistic learning experience by encouraging interns and volunteers to participate in other on-going projects as opportunities arise.

Special qualifications/skills needed:

Some knowledge of plant identification, a desire to learn how to identify plants and some computer experience is preferred. This internship requires hiking through remote sections of the park; good outdoor navigation skills and physical conditioning are recommended.

Duration of internship: 10 weeks, full time. Part time is negotiable.

Duty station is Thurmont, MD. Park housing is available.

## **Catoctin Mountain Park, MD**

### **(2) GIS Assistant**

General Description:

Catoctin Mountain Park - a 5,810-acre hardwood forest park with refreshing streams and scenic vistas, offers a rare haven in a rapidly developing area of the country. The National Park Service is seeking a qualified intern to assist resource management staff in conducting GIS operations at the park.

Intern duties/tasks:

The duties of this position will include:

- Creating maps for reports and presentations
- Creating and documenting data for use in park operations
- Organizing old park datasets
- Collecting data using a Trimble GPS unit for inclusion in the Park GIS dataset.

The GIS Intern will also be encouraged to pursue a research project in their area of interest.

What will intern gain in professional development?

Intern will gain professional experience using GIS to manage natural and cultural resources in a park setting. The intern will use GIS to conduct analyses that support actual park management decisions.

Special qualifications/skills needed:

- Proficiency with the Windows operating system
- Experience making maps and conducting analysis using ArcGIS Desktop v 9.2
- Be motivated and work well independently
- GPS experience is also a plus!

Duration of internship: 10 weeks, full time.

Duty station is Thurmont, MD. Park housing is available.

# C&O Canal National Historical Park, MD

[www.nps.gov/choh](http://www.nps.gov/choh)

## GIS Assistant

### General Description:

The C&O Canal follows the route of the Potomac River for 184.5 miles from Washington, D.C. to Cumberland, MD. The park is seeking a qualified intern to conduct field data collection for numerous on-going projects in the park.

### Intern duties/tasks:

Intern will work for the Resource Management Division and coordinate through the GIS and Natural Resource lead in the Division. Student will collect data in the field, bring it back to the office, verify accuracy and prepare metadata. Intern will provide maps or analysis necessary for the projects assigned. Intern will also obtain GPS locations of Rare/Threaten/Endangered and exotic species within the park.

### What will intern gain in professional development?

Intern will gain skills in collecting field data, reviewing the accuracy of data, preparing metadata to a set of standards, using data for analysis and creating products that are useful to ongoing park projects and surveys.

### Special qualifications/skills needed:

Intern should have knowledge using GPS equipment and ESRI computer applications.

### Duration of internship: 10 weeks, full time.

Duty station is Hagerstown, MD. No park housing is available.

# Harpers Ferry National Historical Park, WV

<http://www.nps.gov/hafe>

## Natural Resource Management Assistant

### General Description:

Harpers Ferry National Historical Park is located at the confluence of the Potomac and Shenandoah rivers in the states of West Virginia, Virginia, and Maryland. Seventy percent of the land in the park is covered with eastern deciduous forest. The park is seeking an enthusiastic individual willing to learn about natural resource management in a national park to assist park staff with varied duties.

### Intern duties/tasks:

Intern will be involved with various duties that may include:

- Assisting in commencing a water monitoring program in the park
- Monitoring Geologic Movement
- Creating new vegetation monitoring plots and exclosures.
- Monitoring Peregrine Falcons
- Monitoring Threatened and Endangered Species in the park
- Conducting Ash Tree Identification
- Monitoring Ash trees for Emerald Ash Borer in the park
- Monitoring deer for Chronic Wasting Disease
- Conducting Integrated Pest Management at the park
- Mapping areas with GPS unit

### What will intern gain in professional development?

The intern will learn a variety of valuable skills related to natural resource management and protections, will gain familiarity with the work and professional opportunities related to resource management in the National Park Service. The intern will also interact with researchers working in the park and will gain skills in conducting groundwater and vegetation analyses.

### Special qualifications/skills needed:

Basic skills in botany are desired. Good health and physical condition is recommended as intern should be able to handle moderate to strenuous work conditions under difficult weather conditions (hot and humid).

Duration of internship: 10 weeks, full time.

Duty station is Harpers Ferry, WV. Park housing is available.

# National Capital Parks-East, Washington, D.C. and MD

[www.nps.gov/nace](http://www.nps.gov/nace)

## Natural Resource Management Assistant

### General Description:

National Capital Parks-East is comprised of several sites, with diverse resources including significant cultural, natural, and recreational units in Washington, D.C. and Maryland. The park Resource Management staff handles a wide variety of projects including resources protection, restoration, curation, interpretation, and management.

### Intern duties/tasks:

Intern will assist park Resource Management staff performing field work, site inspections, and other various duties. Intern will have the opportunity to experience the array of duties involved in protecting and managing resources in a national park.

### What will intern gain in professional development?

Interns will gain knowledge and new perspectives in natural and cultural history, prehistory, and resources and recreation management. The intern will be exposed to myriad of issues and will interact with a wide range of professionals and other stakeholders working with the park.

### Special qualifications/skills needed:

Intern should have a sincere interest/background in biology or paleontology, natural history, archaeology, environmental protection, and restoration. Student should be comfortable working in the outdoors in the heat, mud, and dampness, and possibly exposed to insects and poison ivy. Good writing skills are desired.

Duration of internship: 10 weeks, full-time or part-time.

Duty station is Washington, D.C., SE. Park housing is not available.

# National Mall & Memorial Parks, Washington D.C.

[www.nps.gov/nama](http://www.nps.gov/nama)

## Natural Resource Management Assistant

### General Description:

In the summer of 2009, the park will initiate and complete, using GIS methods, an urban forest inventory for East Potomac Golf Course located in the center of East Potomac Park. East Potomac Park is a large, recreational area with extensive river and channel shoreline. This project, which will establish much-needed baseline information, is just one of many of the tasks that will require the assistance from an Urban Ecology intern.

### Intern duties/tasks:

The main duty would be to provide support to the Natural Resources section of the Resource Management Branch. Primary projects would include assisting with the collection of baseline tree inventory data for East Potomac Park Golf Course and 5 year data collection/update of the UFORE inventory in partnership with Casey Trees (GIS). Ancillary to primary functions would be assisting with Integrated Pest Management (IPM), water quality monitoring, implementation and assessment of special native plant projects, and emergency wildlife situations within the Monumental core. These duties would be performed while adhering to all safety rules and regulations as set by OSHA and the National Park Service.

### What will intern gain in professional development?

An internship at the National Mall & Memorial Parks would expose the student to many facets of urban ecology involving resources of national significance. Although cultural resources tend to be viewed as monuments and memorials, cultural landscapes include plants such as the American elms along the National Mall and Japanese cherry trees that draw millions of visitors to the park every spring, as well as some large designed pools and man-made bodies of water. The experience would provide an intern with a unique experience involving integration of natural and cultural resource management practices. The intern would gain skills in using GIS, forest measuring, water quality monitoring, and other field equipment.

### Special qualifications/skills needed:

Foremost, the intern will need to have a willingness to learn new skills related to natural resource monitoring and physical ability to perform field related and manual labor tasks under varying environmental conditions (heat, inclement weather). Although it would be preferable to have an intern with some botany and/or IPM experience, Park staff would be able to provide on the job training.

### Duration of internship: 10 weeks, full time.

Mature high school seniors at least 18 years of age would be considered for this internship. Duty station is downtown Washington, D.C. No park housing is available.

# Prince William Forest Park, VA

[www.nps.gov/prwi](http://www.nps.gov/prwi)

## General Description:

Prince William Forest Park is seeking nomination to the Climate Friendly Parks Program. The Climate Friendly Parks (CFP) Program, a collaboration of the National Park Service and the U.S. Environmental Protection Agency, provides national parks with management tools and resources to address climate change.

The program has a three-pronged approach.

1. Measure emissions
2. Develop strategies to mitigate emissions and adapt to impacts
3. Share success and educate the public about what they can do in their own lives

## Intern duties/tasks:

The selected intern would be responsible for:

1. Submitting the Climate Friendly Parks Application
2. Training and utilizing the NPS Climate Leadership in Parks (CLIP) Tool, computer based planning Module
3. Developing and conducting a Green House Gas (GHG) emissions inventory
4. Completing a GHG Action Plan.
5. Implementing the GHG Action Plan
6. Launch “Do Your Part”, an online program that gives visitors the information they need to reduce their carbon emissions and thereby help to reduce climate change impacts.
7. Helping to develop educational materials on the Climate Friendly Parks program

## What will intern gain in professional development?

The intern will gain expertise in a ground-level effort to address climate change. The intern will also have the opportunity to learn about National Park Service operations, policies, and management. There will be opportunities for the intern to also work on Natural Resource related projects such as invasive species management, water quality, water chemistry, and flora, and fauna inventories.

## Special qualifications/skills needed:

Intern must be self-motivated, have basic computer skills, good writing skills, and ability to interact with managers to gain information. Student must be comfortable in a forest environment and be willing to work in hot temperatures, and adverse conditions (for example, rain showers, exposure to ticks, chiggers, mosquitoes, spiders, snakes, bees, and other creatures that make city folk cringe.)

## Duration of internship: 10 weeks, full-time.

This position is open to qualified, motivated, independent high school seniors with own transportation. Duty station is Triangle, VA (near Quantico Base). No park housing is available.

# Rock Creek Park, Washington, D.C.

<http://www.nps.gov/rocr>

## Natural Resource Management Assistant/ Botany- GIS

### General Description:

Rock Creek National Park's location in an urban area makes it more vulnerable to invasion because of neighbors that plant invasive species as horticultural plants and high visitor use that facilitates the spread of seeds. An estimated 36-40% of the plants found in Rock Creek are invasive and this number is continuing to grow. The fundamental goal of the project is to identify invasive plant occurrences within the high risk areas in Rock Creek Park. A map of these infestations will provide a comprehensive picture of the invasive plant distribution at Rock Creek Park. Adequate planning *before* action is taken in managing invasive plants allows the park and the region to make informed management decisions and accurately identify priorities. A comprehensive inventory map will also provide a baseline status of the invasive plant populations in the park. This will be useful to gauge the efficacy of management techniques and track changes in the infestations.

### Intern duties/tasks:

- Test pilot protocols for identifying invasive plant occurrences in Rock Creek Park.
- Produce a base map of current invasive plant population distribution based on pilot data.
- Collect standardized data to allow for use in future monitoring projects.
- Create map products showing the locations and extent of invasive plant for use in proposals and reports.
- Generate awareness and facilitate communication through graphical representation of the invasive plant issue in Rock Creek Park
- Review Invasive Species Management Plan for areas that could use improvement and use GIS data to improve the plan.

### What will intern gain in professional development?

Intern will gain experience with plant identification, park planning, scientific techniques in GIS and botany, invasive species management, writing skills, and wildlife biology skills. Intern will have the opportunity to gain familiarity with the work and professionals of the National Park Service. Intern will have access to varied training opportunities.

### Special qualifications/skills needed:

Intern should have the ability and desire to work in the field, in rugged terrain and under difficult conditions (hot, muggy, and wet conditions). Basic GIS skills are desired. Basic plant identification skills are preferred (but not required).

Duration of internship: 8-10 weeks, full time preferred, part-time negotiable.

Duty station is Washington, D.C., NW. Park housing may be available.



# Center for Urban Ecology, Washington, D.C.

<http://www.nps.gov/cue/>

## Data Manager Assistant

### General Description:

The National Capital Region Inventory and Monitoring Network (NCRN) is responsible for monitoring natural resources in the parks of the National Capital Region. An essential component of the monitoring program is data management. The NCRN data management staff are responsible for ensuring the quality, usability and accessibility of the program's data and accomplishing these goals involves working on a variety of tasks ranging from the fairly basic (e.g. data entry) to more complex tasks, such as database development and web design. The NCRN Data Management Program is looking for an intern to help assist with a variety of projects and tasks to help ensure that the NCRN I&M Program provides the best data stewardship possible.

### Intern duties/tasks:

The program is in need of general data management support. The duties may vary but will most likely include data entry and review tasks, updating programmatic databases and assisting with overall file management and organization. Tasks such as editing web pages, data base development, and working with Geographic Information Systems (GIS) are also a possibility depending on the applicants skill set or interests. It is not necessary for someone to have a great deal of experience in these areas, just a willingness to work hard and learn.

In addition to office and computer work, if applicants have interests in field work, the NCRN I&M Program conducts a great deal of field work from spring through fall. While primary duties would be centered on data management, interns are encouraged to accompany field crews and assist with data collection.

### What will intern gain in professional development?

Intern will gain knowledge about the National Park Service and many aspects of the Inventory and Monitoring Program. Applicants will have the opportunity to gain technical experience working with databases, web design, and GIS. Interns will also be introduced to a broad spectrum of ecological monitoring programs from water and vegetation to birds and amphibians.

Special qualifications/skills needed: None, just the willingness to work hard.

Duration of internship: 10 weeks, full time or part-time.

This position is also open to qualified high school senior students with their own transportation.

Duty station is Washington, D.C., NW. No park housing is available.